

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED

FEB 10 2020

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

EMNRD-OCD ARTESIA

☐ AMENDED REPORT
As-Drilled

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

¹ API Number 30-015-44912		² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code 324947	Property Name AIRPORT 36 WXY STATE		⁶ Well Number 10H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC		⁹ Elevation 3217'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	36	22S	26E		337	SOUTH	1327	EAST	EDDY

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	22S	26E		287	NORTH	353	EAST	EDDY

¹² Dedicated Acres 320.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

17 OPERATOR CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.	
Signature 	Date 2/7/2020
Name Adrian Covarrubias	
E-mail Address	
18 SURVEYOR CERTIFICATION	
I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R-Squared Global. FEBRUARY 06, 2020	
Date of Survey	
Signature and Seal of Professional Surveyor:	
Certificate Number LLOYD P. SHORT 21653	

DISTANCES/AREAS RELATIVE TO NA083
COMBINED SCALE FACTOR: 0.99976038 CONVERGENCE: 0.08095500;
NOTE: ALL DIMENSIONS IN U.S. FEET

2	02/06/2020	DEF
REV.	DATE	BY

SHEET 1 OF 1
R3876 001

Entered LAT/LONG
RWP 4-10-20 Revision



RECEIVED

FEB 10 2020



EMNRD-OCD ARTESIA

Marathon Oil Corporation

**Airport State 22-26-36 WXY No. 10H
Eddy County, NM**

February 17, 2019

**Job# LNM1418218
API# 30-015-44912**

Survey Completion Report



PRODIRECTIONAL

Survey Certification Letter

February 17, 2019

HR



Marathon Oil
Corporation

Operator Name: Marathon Oil
Well Name: Airport State 22-26-36 WXY No. 10H
County/Parish: Eddy County,
State: NM
Rig Name: Precision 594
Job Number: LNM1418218

This is to certify the surveys performed on the referenced well by Professional Directional Ent., Inc. are true and correct MWD Surveys, data provided as follows:

Surveyor	Surveyed Depths	Projection to Bit	Dates Performed	Type of Survey
ProDirectional	505' MD – 13,657' MD	13,714' MD	11/28/18 – 01/20/19	MWD

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

850 Conroe Park West Drive | Conroe, TX 77303 | Phone: 936.441.7266

prodirectional.com

The Standard of Excellence in Directional Supervision



Marathon Oil

Eddy County, NM

Airport State 22-26-36 WXY

No. 10H

OH

Survey: ProDirectional

Survey Report

17 February, 2019



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Airport State 22-26-36 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-145'-13657', PTB: 13714'	Database:	WellPlanner1

Project:	Eddy County, NM(NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Airport State 22-26-36 WXY		
Site Position:		Northing:	488,179.22 usft
From:	Map	Easting:	569,555.11 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.342043
		Longitude:	-104.241964
		Grid Convergence:	0.05 °

Well:	No. 10H					
Well Position	+N/-S	0.00 usft	Northing:	488,179.22 usft	Latitude:	32.342043
	+E/-W	0.00 usft	Easting:	569,555.11 usft	Longitude:	-104.241964
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,217.00 usft

Wellbore	OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)	
	HDGM	12/1/2018	7.30	60.03	47,944.90	

Design:	Gyro-MWD-145'-13657', PTB: 13714'				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	0.03	

Company: Marathon Oil
Project: Eddy County, NM(NAD 83)
Site: Airport State 22-26-36 WXY
Well: No. 10H
Wellbore: OH
Design: Gyro-MWD-145'-13657', PTB: 13714'

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well No. 10H
Well @ 3242.00usft
Well @ 3242.00usft
Grid
Minimum Curvature
WellPlanner1

Survey Program **Date** 2/17/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
145.00	426.00	Survey #1 (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s
505.00	13,714.00	Survey #2 (OH)	MWD+HDGM	OWSG MWD + HRGM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	488,179.22	569,555.11
145.00	0.80	98.00	145.00	-0.14	-0.14	1.00	1.01	98.00	488,179.08	569,556.11
237.00	0.40	88.00	236.99	-0.22	-0.22	1.96	1.97	96.38	488,179.00	569,557.07
326.00	0.50	105.00	325.99	-0.31	-0.31	2.64	2.66	96.66	488,178.91	569,557.75
426.00	0.20	99.00	425.99	-0.45	-0.45	3.24	3.27	97.89	488,178.77	569,558.35
505.00	0.50	87.10	504.98	-0.45	-0.45	3.72	3.75	96.95	488,178.77	569,558.83
Pro MWD First Survey: 505' MD										
597.00	1.40	83.20	596.97	-0.30	-0.30	5.24	5.24	93.28	488,178.92	569,560.35
687.00	2.10	83.80	686.93	0.01	0.01	7.97	7.97	89.94	488,179.23	569,563.08
779.00	3.10	95.30	778.83	-0.03	-0.04	12.12	12.12	90.19	488,179.18	569,567.23
870.00	4.70	101.20	869.62	-0.98	-0.99	18.23	18.25	93.11	488,178.23	569,573.34
961.00	5.20	115.70	960.28	-3.49	-3.50	25.60	25.84	97.79	488,175.72	569,580.71
1,052.00	6.30	127.00	1,050.83	-8.28	-8.30	33.31	34.32	103.99	488,170.92	569,588.42
1,141.00	5.80	120.40	1,139.33	-13.49	-13.51	41.08	43.25	108.20	488,165.71	569,596.19
1,231.00	4.10	112.30	1,228.99	-17.01	-17.03	47.98	50.92	109.54	488,162.19	569,603.09
1,320.00	3.60	118.40	1,317.79	-19.54	-19.57	53.39	56.86	110.13	488,159.65	569,608.50
1,409.00	4.90	107.30	1,406.55	-22.00	-22.03	59.47	63.42	110.33	488,157.19	569,614.58
1,499.00	7.30	96.60	1,496.03	-23.79	-23.83	68.82	72.83	109.10	488,155.39	569,623.93
1,588.00	8.60	88.60	1,584.18	-24.27	-24.32	81.09	84.66	106.69	488,154.90	569,636.20
1,677.00	8.20	86.30	1,672.23	-23.70	-23.75	94.08	97.03	104.17	488,155.47	569,649.19
1,766.00	8.00	90.20	1,760.34	-23.30	-23.36	106.61	109.14	102.36	488,155.86	569,661.72



ProDirectional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Airport State 22-26-36 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-145'-13657', PTB: 13714'	Database:	WellPlanner1

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
1,855.00	8.90	96.00	1,848.37	-24.04	-24.10	119.65	122.05	101.39	488,155.12	569,674.76
1,874.00	9.20	96.80	1,867.14	-24.37	-24.43	122.62	125.03	101.27	488,154.79	569,677.73
2,037.00	11.20	104.50	2,027.56	-29.86	-29.94	150.89	153.83	101.22	488,149.28	569,706.00
2,126.00	12.30	104.10	2,114.69	-34.32	-34.41	168.45	171.93	101.55	488,144.81	569,723.56
2,215.00	12.40	102.70	2,201.63	-38.73	-38.82	186.97	190.95	101.73	488,140.40	569,742.08
2,305.00	12.40	100.60	2,289.53	-42.62	-42.72	205.89	210.28	101.72	488,136.50	569,761.00
2,394.00	12.80	107.00	2,376.40	-47.25	-47.37	224.71	229.65	101.90	488,131.85	569,779.82
2,484.00	12.80	106.70	2,464.16	-53.02	-53.15	243.80	249.52	102.30	488,126.07	569,798.91
2,573.00	13.10	105.80	2,550.90	-58.59	-58.72	262.94	269.42	102.59	488,120.50	569,818.05
2,663.00	12.40	106.30	2,638.68	-64.07	-64.21	282.03	289.25	102.83	488,115.01	569,837.14
2,752.00	11.80	105.40	2,725.70	-69.16	-69.31	299.98	307.88	103.01	488,109.91	569,855.09
2,842.00	11.90	105.00	2,813.78	-73.99	-74.16	317.81	326.35	103.13	488,105.06	569,872.92
2,931.00	12.10	104.60	2,900.84	-78.71	-78.88	335.70	344.85	103.22	488,100.34	569,890.81
3,020.00	12.00	103.60	2,987.87	-83.23	-83.41	353.72	363.42	103.27	488,095.81	569,908.83
3,109.00	12.10	109.10	3,074.92	-88.44	-88.64	371.53	381.96	103.42	488,090.58	569,926.64
3,199.00	12.20	109.70	3,162.90	-94.73	-94.93	389.40	400.80	103.70	488,084.29	569,944.51
3,288.00	12.60	109.50	3,249.82	-101.13	-101.34	407.40	419.82	103.97	488,077.88	569,962.51
3,378.00	12.80	108.00	3,337.62	-107.48	-107.70	426.14	439.54	104.18	488,071.52	569,981.25
3,467.00	13.10	107.00	3,424.36	-113.46	-113.69	445.16	459.45	104.33	488,065.53	570,000.27
3,556.00	13.10	106.90	3,511.04	-119.33	-119.58	464.45	479.60	104.44	488,059.64	570,019.56
3,646.00	13.10	105.40	3,598.70	-125.00	-125.25	484.05	499.99	104.51	488,053.97	570,039.16
3,735.00	11.20	103.80	3,685.70	-129.73	-129.99	502.17	518.72	104.51	488,049.23	570,057.28
3,824.00	10.10	102.50	3,773.17	-133.47	-133.74	518.18	535.16	104.47	488,045.48	570,073.29
3,914.00	10.50	108.50	3,861.72	-137.77	-138.05	533.66	551.23	104.50	488,041.17	570,088.77
4,003.00	10.20	110.00	3,949.27	-143.03	-143.32	548.76	567.16	104.64	488,035.90	570,103.87
4,092.00	9.70	110.40	4,036.93	-148.33	-148.63	563.19	582.47	104.78	488,030.59	570,118.30
4,182.00	9.40	111.30	4,125.69	-153.64	-153.94	577.14	597.32	104.93	488,025.28	570,132.25



ProDirectional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Airport State 22-26-36 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-145'-13657', PTB: 13714'	Database:	WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
4,271.00	9.40	110.30	4,213.49	-158.79	-159.10	590.73	611.78	105.07	488,020.12	570,145.84	
4,361.00	9.10	109.40	4,302.32	-163.70	-164.02	604.34	626.20	105.18	488,015.20	570,159.45	
4,450.00	8.80	109.10	4,390.24	-168.26	-168.58	617.41	640.01	105.27	488,010.64	570,172.52	
4,540.00	8.30	108.50	4,479.24	-172.57	-172.90	630.07	653.37	105.34	488,006.32	570,185.18	
4,629.00	9.20	105.30	4,567.20	-176.47	-176.81	643.03	666.89	105.37	488,002.41	570,198.14	
4,718.00	9.40	102.90	4,655.03	-179.97	-180.31	656.98	681.27	105.35	487,998.91	570,212.09	
4,808.00	9.10	102.20	4,743.86	-183.10	-183.46	671.10	695.72	105.29	487,995.76	570,226.21	
4,898.00	9.00	100.40	4,832.74	-185.87	-186.23	684.98	709.84	105.21	487,992.99	570,240.09	
4,987.00	8.80	100.50	4,920.67	-188.36	-188.73	698.52	723.56	105.12	487,990.49	570,253.63	
5,076.00	9.50	103.10	5,008.54	-191.26	-191.63	712.37	737.69	105.06	487,987.59	570,267.48	
5,165.00	9.50	105.00	5,096.32	-194.82	-195.20	726.61	752.38	105.04	487,984.02	570,281.72	
5,254.00	9.80	102.30	5,184.06	-198.33	-198.71	741.11	767.29	105.01	487,980.51	570,296.22	
5,343.00	9.10	101.00	5,271.85	-201.27	-201.67	755.42	781.87	104.95	487,977.55	570,310.53	
5,433.00	8.60	100.20	5,360.78	-203.82	-204.22	769.03	795.68	104.87	487,975.00	570,324.14	
5,522.00	7.60	97.90	5,448.89	-205.80	-206.21	781.41	808.16	104.78	487,973.01	570,336.52	
5,611.00	8.10	99.00	5,537.05	-207.58	-208.00	793.43	820.24	104.69	487,971.22	570,348.54	
5,701.00	8.70	99.90	5,626.09	-209.74	-210.16	806.40	833.33	104.61	487,969.06	570,361.51	
5,790.00	10.10	102.80	5,713.89	-212.62	-213.05	820.64	847.84	104.55	487,966.17	570,375.75	
5,879.00	9.30	105.50	5,801.62	-216.26	-216.70	835.18	862.83	104.55	487,962.52	570,390.29	
5,969.00	8.70	106.80	5,890.51	-220.16	-220.61	848.70	876.91	104.57	487,958.61	570,403.81	
6,058.00	8.40	111.80	5,978.52	-224.52	-224.97	861.18	890.08	104.64	487,954.25	570,416.29	
6,148.00	8.00	111.00	6,067.60	-229.20	-229.65	873.13	902.83	104.74	487,949.57	570,428.24	
6,237.00	7.60	111.30	6,155.78	-233.55	-234.01	884.40	914.83	104.82	487,945.21	570,439.51	
6,326.00	7.40	114.60	6,244.02	-238.06	-238.53	895.09	926.33	104.92	487,940.69	570,450.20	
6,415.00	6.60	115.40	6,332.35	-242.64	-243.11	904.92	937.01	105.04	487,936.11	570,460.03	
6,504.00	5.60	118.30	6,420.85	-246.89	-247.37	913.37	946.27	105.15	487,931.85	570,468.48	
6,594.00	4.70	118.30	6,510.48	-250.71	-251.20	920.48	954.14	105.26	487,928.02	570,475.59	



ProDirectional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Airport State 22-26-36 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-145'-13657', PTB: 13714'	Database:	WellPlanner1

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
6,683.00	3.70	130.10	6,599.25	-254.29	-254.77	925.89	960.30	105.39	487,924.45	570,481.00
6,773.00	3.70	129.50	6,689.06	-258.01	-258.49	930.35	965.59	105.53	487,920.73	570,485.46
6,862.00	3.60	110.60	6,777.88	-260.81	-261.30	935.18	971.00	105.61	487,917.92	570,490.29
6,951.00	4.10	102.90	6,866.68	-262.50	-263.00	940.90	976.96	105.62	487,916.22	570,496.01
7,040.00	3.70	103.30	6,955.47	-263.87	-264.37	946.79	983.01	105.60	487,914.85	570,501.90
7,129.00	3.30	96.60	7,044.31	-264.82	-265.32	952.13	988.41	105.57	487,913.90	570,507.24
7,218.00	2.60	93.80	7,133.19	-265.25	-265.75	956.69	992.92	105.52	487,913.47	570,511.80
7,308.00	2.40	91.60	7,223.10	-265.43	-265.94	960.61	996.75	105.47	487,913.28	570,515.72
7,397.00	2.10	96.60	7,312.04	-265.67	-266.18	964.10	1,000.17	105.43	487,913.04	570,519.21
7,487.00	1.70	102.60	7,401.99	-266.15	-266.66	967.04	1,003.13	105.42	487,912.56	570,522.15
7,576.00	1.20	109.60	7,490.96	-266.75	-267.26	969.20	1,005.38	105.42	487,911.96	570,524.31
7,666.00	3.10	93.70	7,580.89	-267.22	-267.73	972.52	1,008.70	105.39	487,911.49	570,527.63
7,755.00	3.40	102.50	7,669.75	-267.95	-268.46	977.50	1,013.69	105.36	487,910.76	570,532.61
7,845.00	3.40	108.20	7,759.59	-269.35	-269.87	982.64	1,019.02	105.36	487,909.35	570,537.75
7,934.00	2.90	114.70	7,848.45	-271.12	-271.63	987.19	1,023.88	105.38	487,907.59	570,542.30
8,023.00	4.10	129.00	7,937.29	-274.06	-274.58	991.71	1,029.02	105.48	487,904.64	570,546.82
8,113.00	4.80	129.90	8,027.02	-278.50	-279.02	997.10	1,035.40	105.63	487,900.20	570,552.21
8,202.00	3.00	140.80	8,115.81	-282.69	-283.21	1,001.43	1,040.70	105.79	487,896.01	570,556.54
8,291.00	1.00	157.00	8,204.75	-285.21	-285.73	1,003.20	1,043.10	105.90	487,893.49	570,558.31
8,336.00	0.50	156.90	8,249.75	-285.75	-286.27	1,003.43	1,043.47	105.92	487,892.95	570,558.54
8,378.00	0.90	146.80	8,291.74	-286.19	-286.72	1,003.69	1,043.84	105.94	487,892.50	570,558.80
8,468.00	1.00	142.50	8,381.73	-287.41	-287.93	1,004.55	1,045.00	105.99	487,891.29	570,559.66
8,557.00	9.60	350.40	8,470.35	-280.69	-281.21	1,003.78	1,042.43	105.65	487,898.01	570,558.89
8,646.00	21.60	356.80	8,555.92	-256.93	-257.45	1,001.62	1,034.18	104.41	487,921.77	570,556.73
8,735.00	33.50	354.70	8,634.69	-215.97	-216.49	998.43	1,021.63	102.23	487,962.73	570,553.54
8,824.00	44.10	357.40	8,703.95	-160.41	-160.94	994.75	1,007.68	99.19	488,018.28	570,549.86
8,914.00	54.20	2.60	8,762.77	-92.47	-92.99	994.98	999.32	95.34	488,086.23	570,550.09

Company: Marathon Oil
Project: Eddy County, NM(NAD 83)
Site: Airport State 22-26-36 WXY
Well: No. 10H.
Wellbore: OH
Design: Gyro-MWD-145'-13657', PTB: 13714'

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well No. 10H
 Well @ 3242.00usft
 Well @ 3242.00usft
 Grid
 Minimum Curvature
 WellPlanner1

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
9,003.00	65.10	4.30	8,807.67	-15.93	-16.45	999.66	999.79	90.94	488,162.77	570,554.77
9,092.00	74.00	358.50	8,838.76	67.32	66.79	1,001.57	1,003.80	86.18	488,246.01	570,556.68
9,137.00	76.60	356.00	8,850.18	110.78	110.26	999.48	1,005.54	83.70	488,289.48	570,554.59
9,259.00	87.70	356.50	8,866.82	231.19	230.67	991.59	1,018.07	76.90	488,409.89	570,546.70
9,355.00	86.70	355.70	8,871.51	326.85	326.33	985.07	1,037.72	71.67	488,505.55	570,540.18
9,449.00	88.50	357.30	8,875.44	420.58	420.07	979.34	1,065.63	66.78	488,599.29	570,534.45
9,543.00	89.80	359.60	8,876.84	514.53	514.01	976.80	1,103.79	62.25	488,693.23	570,531.91
9,637.00	90.90	0.10	8,876.26	608.52	608.01	976.55	1,150.36	58.09	488,787.23	570,531.66
9,732.00	90.50	359.40	8,875.10	703.51	703.00	976.14	1,202.94	54.24	488,882.22	570,531.25
9,827.00	90.30	1.80	8,874.44	798.50	797.99	977.13	1,261.57	50.76	488,977.21	570,532.24
9,922.00	88.20	359.60	8,875.68	893.47	892.96	978.29	1,324.55	47.61	489,072.18	570,533.40
10,016.00	87.10	358.70	8,879.54	987.38	986.87	976.90	1,388.61	44.71	489,166.09	570,532.01
10,110.00	87.00	1.50	8,884.38	1,081.25	1,080.74	977.06	1,456.93	42.12	489,259.96	570,532.17
10,205.00	88.00	1.10	8,888.52	1,176.13	1,175.62	979.22	1,530.01	39.79	489,354.84	570,534.33
10,299.00	88.50	2.80	8,891.39	1,270.03	1,269.52	982.41	1,605.24	37.73	489,448.74	570,537.52
10,394.00	91.90	3.40	8,891.06	1,364.88	1,364.36	987.55	1,684.26	35.90	489,543.58	570,542.66
10,488.00	89.90	1.40	8,889.58	1,458.78	1,458.26	991.48	1,763.40	34.21	489,637.48	570,546.59
10,582.00	88.00	0.20	8,891.31	1,552.75	1,552.23	992.80	1,842.57	32.60	489,731.45	570,547.91
10,677.00	91.40	1.60	8,891.80	1,647.72	1,647.20	994.29	1,924.03	31.12	489,826.42	570,549.40
10,771.00	90.40	1.30	8,890.33	1,741.68	1,741.16	996.67	2,006.23	29.79	489,920.38	570,551.78
10,865.00	88.00	359.60	8,891.64	1,835.66	1,835.13	997.41	2,088.67	28.52	490,014.35	570,552.52
10,960.00	92.30	1.40	8,891.39	1,930.63	1,930.10	998.23	2,172.96	27.35	490,109.32	570,553.34
11,055.00	91.30	0.10	8,888.41	2,025.57	2,025.05	999.48	2,258.27	26.27	490,204.27	570,554.59
11,149.00	90.40	359.40	8,887.01	2,119.56	2,119.03	999.07	2,342.74	25.24	490,298.25	570,554.18
11,243.00	91.70	359.80	8,885.29	2,213.53	2,213.01	998.41	2,427.81	24.28	490,392.23	570,553.52
11,337.00	89.70	1.30	8,884.14	2,307.52	2,306.99	999.31	2,514.13	23.42	490,486.21	570,554.42
11,432.00	90.40	1.50	8,884.06	2,402.49	2,401.96	1,001.63	2,602.44	22.64	490,581.18	570,556.74

Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Airport State 22-26-36 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-145'-13657', PTB: 13714'	Database:	WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
11,527.00	87.60	1.50	8,885.72	2,497.43	2,496.91	1,004.12	2,691.25	21.91	490,676.13	570,559.23	
11,621.00	86.00	1.70	8,890.96	2,591.25	2,590.72	1,006.74	2,779.45	21.24	490,769.94	570,561.85	
11,716.00	86.60	0.60	8,897.09	2,686.03	2,685.50	1,008.64	2,868.67	20.59	490,864.72	570,563.75	
11,810.00	92.00	2.50	8,898.24	2,779.95	2,779.42	1,011.19	2,957.65	19.99	490,958.64	570,566.30	
11,905.00	88.90	358.90	8,897.50	2,874.91	2,874.38	1,012.35	3,047.45	19.40	491,053.60	570,567.46	
11,999.00	88.70	358.20	8,899.46	2,968.86	2,968.33	1,009.97	3,135.45	18.79	491,147.55	570,565.08	
12,093.00	90.90	358.40	8,899.79	3,062.81	3,062.29	1,007.18	3,223.66	18.21	491,241.51	570,562.29	
12,187.00	90.60	357.50	8,898.56	3,156.74	3,156.22	1,003.82	3,312.00	17.64	491,335.44	570,558.93	
12,281.00	90.60	357.50	8,897.58	3,250.64	3,250.12	999.72	3,400.40	17.10	491,429.34	570,554.83	
12,376.00	89.20	357.90	8,897.74	3,345.56	3,345.04	995.90	3,490.15	16.58	491,524.26	570,551.01	
12,470.00	89.40	359.70	8,898.89	3,439.53	3,439.01	993.94	3,579.76	16.12	491,618.23	570,549.05	
12,564.00	87.50	359.80	8,901.43	3,533.49	3,532.97	993.53	3,670.01	15.71	491,712.19	570,548.64	
12,659.00	86.70	359.70	8,906.24	3,628.37	3,627.85	993.11	3,761.32	15.31	491,807.07	570,548.22	
12,752.00	86.90	359.30	8,911.43	3,721.22	3,720.70	992.30	3,850.75	14.93	491,899.92	570,547.41	
12,847.00	87.10	359.90	8,916.40	3,816.09	3,815.57	991.64	3,942.32	14.57	491,994.79	570,546.75	
12,941.00	86.40	359.10	8,921.73	3,909.93	3,909.41	990.82	4,033.02	14.22	492,088.63	570,545.93	
13,035.00	91.70	2.90	8,923.29	4,003.85	4,003.33	992.46	4,124.52	13.92	492,182.55	570,547.57	
13,129.00	90.60	2.20	8,921.40	4,097.74	4,097.22	996.64	4,216.69	13.67	492,276.44	570,551.75	
13,223.00	89.80	359.80	8,921.08	4,191.72	4,191.20	998.28	4,308.44	13.40	492,370.42	570,553.39	
13,317.00	90.20	358.40	8,921.08	4,285.70	4,285.18	996.81	4,399.59	13.10	492,464.40	570,551.92	
13,411.00	88.80	357.50	8,921.90	4,379.63	4,379.11	993.45	4,490.39	12.78	492,558.33	570,548.56	
13,508.00	89.80	357.70	8,923.08	4,476.54	4,476.02	989.38	4,584.06	12.46	492,655.24	570,544.49	
13,602.00	92.20	355.90	8,921.44	4,570.36	4,569.85	984.14	4,674.62	12.15	492,749.07	570,539.25	
13,657.00	92.70	355.80	8,919.09	4,625.17	4,624.65	980.16	4,727.38	11.97	492,803.87	570,535.27	
Last Survey: 13657' MD											
13,714.00	92.70	355.80	8,916.41	4,681.95	4,681.44	975.99	4,782.09	11.78	492,860.66	570,531.10	
PTB: 13714' MD											

Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Airport State 22-26-36 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-145'-13657', PTB: 13714'	Database:	WellPlanner1

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
505.00	504.98	-0.45	3.72	Pro MWD First Survey: 505' MD
13,657.00	8,919.09	4,624.65	980.16	Last Survey: 13657' MD
13,714.00	8,916.41	4,681.44	975.99	PTB: 13714' MD